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| 09/910,604 | 07/20/2001 | Kouichi Harada | 09792909-5090 | 2174 |

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/910,604 | Applicant(s) HARADA, KOUICHI | |
| | Examiner Jacqueline Wilson | Art Unit 2612 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 7 is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1,2, and 4-6 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that the Morimoto is not a valid reference under 35 U.S.C. 102 (b). However, in order to reject a claim using 35 U.S.C. 102 (b), the invention was patented or described in a printed publication in this country more than one year prior to the date of **application for patent in the US**. In this case, Morimoto was patented on October 19, 1999 and the application was filed on 07/20/01. Therefore, the reference is valid. However, the examiner will use a different reference to discuss the amended claims. Please see rejection of the claims below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Atac et al. (US 5,742,659).**

Regarding Claim 1, Atac et al teaches an image section having a plurality of pixels arranged two dimensionally (see fig. 2; 32) in the horizontal and vertical direction, the image section comprising a first area formed of a first pixel group (see fig. 5B, 34

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and 36) and a second area formed of a second pixel group (38 and 40), the first area and the second area being disposed adjacent to each other in the horizontal direction (shown in fig. 5B), a first electric-charge transfer section (42 and 43) disposed outside the image area for transferring the signal electric charges of the first area in the horizontal direction, a second electric-charge transfer section extending across the entire width of the image section (44 and 45) and disposed outside the image area for transferring the signal electric charges of the second area in the horizontal direction, and driving means for driving the first and second electric-charge transfer sections in an identical direction (shown in fig. 5B, 3rd and 4th pictures; CCD driver 126), wherein the first and second electric-charge transfer sections are disposed such that the first electric-charge transfer section transfers only the signal electric charges of the first area and the second electric-charge transfer section transfers only the signal electric charges of the second area (referred to as two corner readout).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 2, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atac et al. (US 5,742,659) as applied to claim 1 above, and further in view of Morimoto (US 5,969,759).

Regarding Claim 2, Atac et al teaches the driving means drives the CCD, but fails to specifically disclose the driving means drives the first and second electric-charge transfer sections by an identical driving signal. However, Morimoto teaches that it is well known in the art to use the same pulse signals to drive the transfer sections (col. 6, lines 35+). It would have been obvious to drive the first and second electric-charge transfer section of the CCD using identical driving signals since the image is captured using a clock signal. This provides accuracy in capturing and reading out images as well as faster processing of the image signal. Therefore, it would have been obvious to one having ordinary skill in the art to modify Atac et al with Morimoto by having the driving means drive the first and second electric-charge transfer sections by an identical driving signal.

Claim 6 is a method claim of Claim 1 and is therefore analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 8 is a method claim of Claim 1 and is therefore analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or fairly suggest an image section comprising a first area formed of a first pixel group and a second area formed of a second pixel group, and the first area and the second area being disposed adjacent to each other in the horizontal direction, a first electric-charge transfer section disposed outside the image area for transferring the signal electric charges of the first area in the horizontal direction, a second electric-charge transfer section extending across the entire width of the image section and disposed outside the image area for transferring the signal electric charges of the second area in the horizontal direction, a driving means for driving the first and second electric-charge transfer sections in an identical direction, wherein the first and second electric-charge transfer sections are disposed such that the first electric-charge transfer section transfers only the signal electric charges of the first area and the second electric-charge transfer section transfers only the signal electric charges of the second area, as claimed in Claim 1, further comprising a vertical transfer section for transferring the signal electric charges of the second area to the second electric-charge transfer section without passing through the first electric-charge transfer section, wherein **the first electric-charge transfer section is disposed between the first area and the second electric-charge transfer section**, and the vertical transfer

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section is disposed between the second area and the second electric-charge transfer section.

7. **Claims 5 and 7 are allowed.**

The prior art neither teaches nor fairly suggests a solid-state image device comprising an image section having a plurality of pixels arranged two dimensionally in the horizontal direction and in the vertical direction, the image section comprising a first area formed of a first pixel group and a second area formed of a second pixel group, and the first area and the second area being disposed adjacent to each other in the horizontal direction, a first electric-charge transfer section disposed outside the image area for transferring the signal electric charges of the first area in the horizontal direction, a second electric-charge transfer section extending across the entire width of the image section and disposed outside the image area for transferring the signal electric charges of the second area in the horizontal direction, and a vertical transfer section for transferring the signal electric charges of the second area to the second electric-charge transfer section, wherein **the first electric-charge transfer section is disposed between the first area and the second electric-charge transfer section,** and the vertical transfer section is disposed between the second area and the second electric-charge transfer section, as claimed in Claim 5.

Claim 7 is substantially similar to Claim 5.

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Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Wilson whose telephone number is (571) 272-7322. The examiner can normally be reached on 8:30am-5:00pm (alternate Fridays off).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JW

08/04/05


James J. Groody
Supervisory Patent Examiner
Art Unit ~~262~~ 2616